

## CLAIMS

1. A wireless mouse device free of a battery comprising:  
a mouse having therein a signal generating circuit to form signals of commands of said mouse, and being integrated to have  
5 a power processing circuit and a sensing coil;  
a receiver unit connected with a mainframe of a computer, and being integrated to have therein a microprocessor, an alternative signal circuit, an emitting/receiving coil, and being provided for receiving RF signals from said mouse;  
10 so that when said mainframe of said computer is activated, said receiver unit generates high frequency signals through said alternative signal circuit, and said emitting/receiving coil emits said signals, said mouse receives harmonic vibrations of said high frequency signals through said sensing coil, and said  
15 power processing circuit makes pressure-multiplication processing for said harmonic vibrations received to make said harmonic vibrations an electric power of internal circuits for driving said mouse.
2. The wireless mouse device free of a battery as in claim  
20 1, wherein: said mouse further has a modulation circuit, said receiver unit further has a driving circuit, a signal amplifying demodulation circuit and a signal processing circuit to make integration and transmitting of signals.
3. The wireless mouse device free of a battery as in claim  
25 1, wherein: the operation mode between said mouse and said

receiver unit is adapted to changing to the operation mode between a keyboard and said receiver unit.

4. The wireless mouse device free of a battery as in claim 1, wherein: the operation mode between said mouse and said receiver unit is combined with the operation mode between a keyboard and said receiver unit, so that said receiver unit is used for both signal transmission of said mouse and said keyboard.

5. The wireless mouse device free of a battery as in claim 1, wherein: said receiver unit is designed as a style of a mouse pad directly for sliding of said mouse.

6. The wireless mouse device free of a battery as in claim 4, wherein: said receiver unit is designed as a style of a mouse pad directly for sliding of said mouse.

7. The wireless mouse device free of a battery as in claim 1, wherein: said receiver unit is connected with said mainframe through a signal line, said signal line directly obtain electric power from said mainframe for transmitting signals.

8. The wireless mouse device free of a battery as in claim 1, wherein: said receiver unit obtains electric power through an electric power line.

9. A wireless mouse device free of a battery comprising a mouse pad and a mouse for RF signal transmission, wherein:

said mouse pad is for placing thereon a mouse, it is connected with circuits of a notebook and is provided in a lower

layer of said notebook to be pivotally rotated for accommodating or drawn out; said mouse pad is provided with a receiver unit which further includes therein a microprocessor, an alternative signal circuit and an emitting/receiving coil for receiving RF  
5 signals from said mouse, thereby signal transmission and connection between said mouse and said notebook is achieved, and said receiver unit generates high frequency signals through said alternative signal circuit, and said emitting/receiving coil emits said signals;

10 said mouse is integrated to have a signal generating circuit, a power processing circuit and a sensing coil; said signal generating circuit forms signals of commands of said mouse, said sensing coil receives harmonic vibrations of said high frequency signals, and said power processing circuit makes pressure-  
15 multiplication processing for said harmonic vibrations received to make said harmonic vibrations an electric power of internal circuits for driving said mouse.

10. The wireless mouse device free of a battery as in claim 9, wherein: said mouse further has a modulation circuit, said  
20 receiver unit further has a driving circuit, a signal amplifying demodulation circuit and a signal processing circuit to make integration and transmitting of signals.

11. A wireless mouse device free of a battery comprising:  
a mouse pad and a mouse for RF signal transmission, wherein:  
25 said mouse pad is for placing thereon a mouse, it is

connected with circuits of a keyboard of a mainframe of a desk computer and is provided in a lower layer of said keyboard to be pivotally rotated for accommodating or drawn out; said mouse pad is provided with a receiver unit which further includes  
5 therein a microprocessor, an alternative signal circuit and an emitting/receiving coil for receiving RF signals from said mouse, thereby signal transmission and connection between said mouse and said mainframe of a desk computer through said keyboard is achieved, and said receiver unit generates high frequency  
10 signals through said alternative signal circuit, and said emitting/receiving coil emits said signals;

said mouse is integrated to have a signal generating circuit, a power processing circuit and a sensing coil; said signal generating circuit forms signals of commands of said mouse, said  
15 sensing coil receives harmonic vibrations of said high frequency signals, and said power processing circuit makes pressure-multiplication processing for said harmonic vibrations received to make said harmonic vibrations an electric power of internal circuits for driving said mouse.

20 12. The wireless mouse device free of a battery as in claim 11, wherein: said mouse further has a modulation circuit, said receiver unit further has a driving circuit, a signal amplifying demodulation circuit and a signal processing circuit to make integration and transmitting of signals.

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